The Changing Role of the CIO

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What's most important today?

60% of Top IT Executives identify "Improving Staff Productivity" as their biggest IT priority for 2014

55% of Top IT Executives say they are open to employee-led feedback on IT security policies – and will adjust policy based on feedback

Versus traditional CIO/IT:

- ✔ Back-office focus
- ✔ Cost reduction/containment the top priority
- ✔ IT maintains strict control over processes and policy

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Employee Productivity and Empowerment Linked with Mobility/BYOD

The CIO role is shifting from a concentrated focus on managing and protecting centralized back-office IT resources to driving employee productivity and empowerment. Mobile deployment/enablement and BYOD are changing IT's relationship with end-users and the CIO's role. Mobility empowers "always on" employee productivity and BYOD empowers employee device choice.

Mobile Workers Increasing

64% of top IT execs say their organization's number of mobile workers has increased or will be increasing.

Enterprise Tablet Use Growing

68% say their mobile workers use tablets in addition to smartphones.

Mobile Enterprise Applications Use Growing

68% say their organization has already deployed or will soon be deploying mobile enterprise applications.

BYOD Will Increase as the Workplace Shifts to Younger Employees

In 2014, 51% of top IT execs say their organization allows BYOD to appeal to young workers.

BYOD Empowers Employees

56% say their organization allows BYOD in order empower employee device choice.

BYOD Supports Productivity

64% say their organization's top reason for allowing BYOD is to enhance productivity.

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The CIO's Role May Be Changing, but Security is Still a Top Priority

Mobility empowers "always on" employee productivity and BYOD empowers employee device choice. Increased mobile deployment/enablement and BYOD heighten risk exposure and the difficulty of security management.

69% of top IT executives say mobile security is a top priority for their organization to address

61% say mobile security is an area of risk for their organization

Login

Increased Mobility Has Security Ramifications

Mobility empowers "always on" employee productivity and BYOD empowers employee device choice.

Increased mobile deployment/ enablement and BYOD heighten risk exposure and the difficulty of security management in ALL of these challenge areas.

Dealing with major security challenges is an IT reality

61% of top IT execs say their organization has dealt with at least one major security challenge over the past 12 months

Of the organizations who have dealt with at least one major security challenge over the past 12 months

48% have dealt with end-user exposure to malicious web sites

47% with end-user installation of unauthorized applications on computers or mobile devices

34% with access to the internal network or applications through non-secure devices

30% with inadvertent internal use or release of customer information/ data

29% with an inadvertent internal breach of data security policy

Deployment of multiple mobile platforms – not just BlackBerry

88% say their organization supports either iOS and/or Android devices for employee work use

63% say their organization supports both Android and iOS devices for employee work use

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Enterprise Mobility Isn't Just Blackberry Anymore

The Smartphone Landscape is Changing in Canada

In 2012, Canadian executives said that approximately 80% of their smartphones were BlackBerry. Just one year later, that percentage dropped to 60%, and is dropping further in 2014. At the same time, Android's presence is growing from 10% of enterprise smartphones in 2012, to 15% in 2013, and accelerating in 2014.

Source: IDC Canada, "Mobility in the Canadian Enterprise", Doc#CA5MS13, Nov 2013; IDC Canada mobile phone tracker, Q4 2013

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Samsung Gets Smartphone Love From the Enterprise

Samsung has become the #1 preferred Android brand among Canadian businesses, with 42% of Canadian executives indicating they currently have Samsung smartphones deployed.*

Tablet Market Led by Apple… But Android Share is Growing

Apple holds onto the dominant market share today, but that lead is giving way to Android, as Canadian executives with tablets indicate that 39% of their tablets are running Android today, and 42% will run it in 2014.**
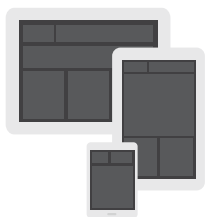
Samsung Leads the Android Tablet Market

Samsung was the most preferred Android brand among executives looking to buy tablets in the next 12 months, and the second most common brand overall (the first was Apple).***

Source: IDC Canada, "Mobility in the Canadian Enterprise", Doc#CA5MS13, Nov 2013; IDC Canada mobile phone tracker, Q4 2013.
*** Source: IDC Canada, "Mobility in the Canadian Enterprise", Doc#CA5MS13, Nov 2013.*
****Source: IDC Canada, "Mobility in the Canadian Enterprise", Doc#CA5MS13, Nov 2013*

CIOs Are Concerned with BYOD's Security Ramifications

Maintaining Security Levels is Critical – to CIOs. 96% of top IT execs say maintaining security levels when it comes to BYOD is important. 70% say IT and network security is a high or top priority for their organization. However:

Mobile Security Solution Deployment Lags BYOD

Only 57% of top IT execs whose organizations allow BYOD have deployed a mobile security solution.

Security Policy Development and Implementation Lags BYOD

Only 46% of top IT execs whose organizations allow BYOD have already implemented a "sound set of security policies for BYOD."

Measurement of Mobile Security Effectiveness Lags BYOD

Only 33% of top IT execs whose organizations allow BYOD use metrics like access control, awareness and training, contingency planning, incident response, media protection and/ or risk assessment to measure mobile security effectiveness.

48% say measuring mobile security effectiveness isn't an exact science, so developing hard metrics is difficult.

19% say they don't measure mobile security effectiveness at all.

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Simplicity and BYOD Friendliness are Crucial

84%

CIOs want mobile security simplicity

84% of top IT execs say solution simplicity (e.g. simple implementation and easy administration) is an important decision criteria when it comes to mobile security solutions.
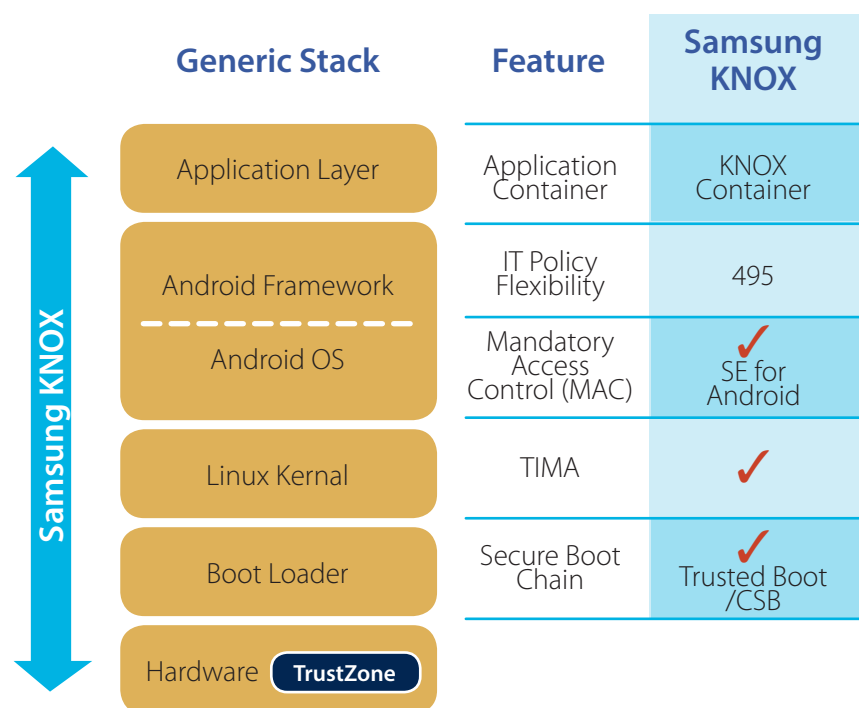
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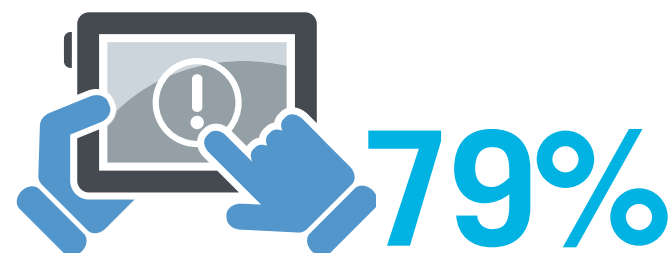
CIOs want mobile security BYOD friendliness

79% of top IT execs say the level of BYOD friendliness is an important decision criteria when it comes to mobile security solutions.

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Samsung KNOX
Ties Directly Into the HW of Phones

Samsung KNOX

Generic Stack	Feature	Samsung KNOX
Application Layer	Application Container	KNOX Container
Android Framework — Android OS	IT Policy Flexibility	495
	Mandatory Access Control (MAC)	SE for Android ✓
Linux Kernal	TIMA	✓
Boot Loader	Secure Boot Chain	Trusted Boot /CSB ✓
Hardware **TrustZone**		

KNOX Full Stack Approach

Security Methodology
- Containerized – KNOX container separates personal use and data from work environment and data
- Separate personal and work phone experience for users on the same device

Mobile Device Management and Policy Support
- Device management through MDM partners (most leading MDM solutions support KNOX)
- Incorporating Samsung's SAFE program, KNOX delivers support for 495+ policy options

Authentication
- Latest Samsung devices (Galaxy S5) support two-factor fingerprint/passcode authentication

Mandatory Access Control (MAC)
- Provides system-controlled policy restricting access to resource objects
- KNOX utilizes SE Android to provide MAC

Keys and Certificates
- Provides protected storage and secure management of cryptographic keys and offer enterprise certificate management capabilities

Secure Boot
- Includes a secure or trusted boot process that verifies the integrity of the OS at startup and that will prevent a device from starting up if the OS has been compromised

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CIO Wish List
To support the Changing Role of the CIO, top IT execs say:

Simplify mobile security solutions

We need to develop hard metrics to measure mobile security effectiveness

Mobile security solutions need to be BYOD friendly

We need to implement sound security policy for BYOD

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